

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-21. (Canceled)

22-36. (Canceled)

37. (Currently Amended) A method for monitoring, from a remote location comprising a monitor and control unit, operations of a head-end in an information distribution system, the method comprising:

providing a head-end for delivering programming guide and contents to remote set top terminals coupled to display devices for viewing the programming guide and contents;

providing a service manager at the head-end for monitoring parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals;

providing, at the head-end separately from the service manager, a session manager at the head-end for communicating with the set top terminals to control sessions with the set top terminals and manage usage and demands of the set top terminals;

providing a monitoring and control device remotely coupled to the head-end for remotely monitoring and controlling the head-end by communicating with both the service manager and the session manager to poll both the service manager and the session manager to obtain from the service manager ~~receiving status from the service manager for~~ parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals and to obtain ~~for receiving~~ status from the session manager for usage and demands of the set top terminals demands;

collecting by the monitoring and control device an identity, a type, a capability and a reporting level for a plurality of remote devices designated for responding to monitoring and control messages relating to the operation of the head-end;

storing, at the monitoring and control device, the collected [[an]] identity, [[a]] type, [[a]] format capability and [[a]] reporting level for [[a]] the plurality of remote

devices ~~designated for responding to monitoring and control messages relating to the operation of the head end from the monitoring and control device;~~

processing, at the monitoring and control device, the status received from the service manager and the status received from the session manager to present in a graphical user interface a display of the parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals obtained from the service manager and a display of the status obtained from the session manager;

activating an alert using the graphical user interface to generate a monitoring and control message relating to the operation of the head-end;

analyzing the generated monitoring and control message and the stored identity, type, format capability and reporting level for the plurality of remote devices to identify a remote device designated to receive the generated monitoring and control message and to determine a ~~type and format~~ capability for the generated monitoring and control message to be provided to the identified remote device; and

providing a communication server for establishing communication between the plurality of remote devices and the monitoring and control device and for providing the generated monitoring and control message to the identified remote device according to the determined type and format capability.

38. (Previously Presented) The method of claim 37 further comprising receiving at the monitoring and control device a response messages from the identified remote device.

39. (Previously Presented) The method of claim 38, wherein the receiving at the monitoring and control device a response messages from the identified remote device further comprises receiving at the monitoring and control device a command for adjusting control of the operations of the head-end.

40. (Currently Amended) The method of claim 37 further comprising:
receiving at the communication server a response message from the identified remote device;

forwarding the response message from the communication server to the monitor and control device;

forwarding the response message, received by the monitor and control device from the communication server, to a responsible entity at the head-end, and

adjusting, at the monitor and control device, a parameter of an operation performed by an element at the head-end in response to receiving the command via the response message from the identified remote devices.

41. (Currently Amended) The method of claim 37 further comprising polling, by the monitor and control device, a plurality of head-ends for status relating to the operations of elements of the plurality of head-ends.

42. (Previously Presented) The method of claim 37, wherein the generating the monitoring and control message relating to the operation of the head-end further comprises including status relating to encoding operations performed by an element of the head-end in the generated the monitoring and control message.

43. (Previously Presented) The method of claim 27, wherein the generating the monitoring and control message relating to the operation of the head-end further comprises including status relating to one or more buffers used to store encoded data by an element at the head-end in the generated the monitoring and control message.

45. (Previously Presented) The method of claim 23, wherein the generating the monitoring and control message relating to the operation of the head-end further comprises including status relating to multiplexing operations performed by an element at the head-end in the generated the monitoring and control message.

46. (Previously Presented) The method of claim 23, wherein the generating the monitoring and control message relating to the operation of the head-end further comprises including status relating to a particular transport stream transmitted from the head-end by an element of the head-end in the generated the monitoring and control message.

47. (Previously Presented) The method of claim 23, wherein the generating the monitoring and control message relating to the operation of the head-end further comprises including status relating to bit rates for a plurality of types of data being provided from the head-end by an element of the head-end in the generated the monitoring and control message.